

**NHU New H Holstein Utilities**

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November 12, 2002

Mr. Scot Cullen  
Public Service Commission  
610 N. Whitney Way  
P.O. Box 7854  
Madison, WI 53707-7854

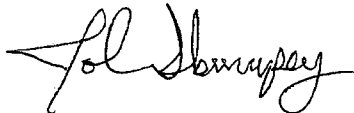
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Electric Division

RE: In the Matter of Filing Reporting Requirements for Appropriate Inspection and Maintenance, PSC Rule 113.0607(6)

Dear Mr. Cullen:

Enclosed for filing are 3 copies of New Holstein Utility's report to the commission, submitted every two years, showing compliance with its Preventative Maintenance Plan. Approximately 20% of the distribution system has been inspected, and except for replacing some fading high voltage signs, 100% of the maintenance needed on that area that has been inspected is completed.

Very truly yours,



John Skurupey  
General Manager  
New Holstein Utilities

Enclosures

# **TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTATIVE MAINTENANCE PLAN**

**New Holstein Utilities**

**FILING DEADLINE  
FEBRUARY 1, 2003**

December 19, 2000

John Skurupey

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This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

## **I Reporting Requirements:** PSC 113.0607(6) states;

Each utility shall provide a periodic report to the commission showing compliance with its Preventative Maintenance Plan. The report shall include a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

## **II Inspection Schedule and Methods:**

SCHEDULE:	MONTHLY	ANNUAL	EVERY 5 YEARS
Transmission ( 69Kv)		X	X
Substations	X	X	
Distribution (OH & UG)			X

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

1. IR – infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
2. RFI - Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
3. SI – structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
4. Clearance – refers to proper spacing of conductors from other objects, trees and conductors.
5. EC – equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5 year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

## **III Condition Rating Criteria**

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies.

- 0) Good condition
- 1) Good condition but aging
- 2) Non-critical maintenance required – normally repair within 12 months
- 3) Priority maintenance required – normally repair within 90 days
- 4) Urgent maintenance required – report immediately to the utility and repair normally within 1 week

#### **IV Corrective Action Schedule**

The rating criteria as listed above determine the corrective action schedule.

#### **V Record Keeping**

All inspection forms and records will be retained for a minimum of 10 years. The inspection form contains all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

#### **VI Reporting Requirements**

A report and summary of this plan's progress will be submitted every two years with the first report due to the Commission by February 1, 2003. The report will consist of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

#### **VII Inspected Circuits and Facilities**

Circuit # and description	Substation
<b>Circuit B1</b>	<b>New Holstein Substation</b>

Base load and peaking generation, less than 50 megawatts per unit in size, is typically subject to pre-operational checks, in addition to checks and maintenance during and after periods of operation. Emergency generation is test run and maintained every *(type in a period of time not exceeding one month)* to confirm its operational readiness.

#### **VIII Scheduling Goals Established and Success of Meeting the Criteria:**

It was this utility's goal to complete all monthly substation inspections and to inspect 20% of the distribution system. In addition, we expected to complete all scheduled maintenance resulting from the inspections within the prescribed time periods specified in the rating criteria.

We are approaching the maintenance inspection and repairs on a map-by-map basis due to the large amount of rural lines that New Holstein

Utilities owns. One circuit, B1 as stated above, serves the rural area and is therefore the only circuit listed in section VII.

All of the inspection goals were met. One priority maintenance item was noted and repaired within 30 days. The priority maintenance item remediation consisted of rebuilding slightly more than one mile of single-phase overhead line. Of the 35 non-critical maintenance items found, all were repaired on time. There were numerous map locations indicating good but aging, which are pole signs that are fading and need to be replaced. During the summer of 2003, a part-time employee will be completing this work.

Also completed in the prior 2 years, all four of the substation transformer load tap changers (LTCs) were drained, cleaned, inspected and refilled with new oil. In addition to the LTCs, two of two oil circuit reclosures (OCRs) in the substation were sent in for inspection and cleaning.

## **IX Facility condition – rating criteria:**

The overall distribution system is in excellent condition. There is current and ongoing work on the system to replace the “flipper type” fuse links on existing transformer settings with fused cutouts. There has been an ongoing problem of lightning arresters partially failing, resulting in sporadic OCR operations. This coupled with customers failing to notify the utility immediately instead of waiting for up to one month has resulted in a few customer complaints.

The whole distribution system is divided into 5 sections for a regular tree-trimming schedule. The system section to be trimmed in a particular year is patrolled prior to trimming to determine the trimming needs and to schedule trimming locations. At the time of patrol, the lines are also looked at for maintenance items (which are repaired immediately) but are not documented due to the focus on tree trimming. Therefore, it can be assumed that inspection and maintenance is done more often than what is stated in this report.